

<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number: 02103-381001/AABOSS16
	Application Number 10/657,496	Filed September 8, 2003
	First Named Inventor Paul T. Bender	
	Art Unit 3657	Examiner Mariano Ong Sy

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

applicant/inventor.

assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b)  
is enclosed. (Form PTO/SB/96)

\_\_\_\_\_  
Signature

Charles Hieken

\_\_\_\_\_  
Typed or printed name

attorney or agent of record 18,411  
(Reg. No.)

\_\_\_\_\_  
(617) 542-5070

\_\_\_\_\_  
Telephone number

attorney or agent acting under 37 CFR 1.34.  
Registration number if acting under 37 CFR 1.34

\_\_\_\_\_  
July 17, 2009

\_\_\_\_\_  
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below'.

Total of 1 form is submitted.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Paul T. Bender                          Art Unit : 3657  
Serial No. : 10/657,496                          Examiner : Mariano Ong Sy  
Filed : September 8, 2003                          Conf. No. : 9342  
Title : FAILSAFE OPERATION OF ACTIVE VEHICLE SUSPENSION

Hon. Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

PRE-APPEAL BRIEF

Claims 1-3, 5-7, 9, 11-13, 15, 16, 18-22, 24-28, 30-32, 34, 36-41, 59-65, 67-69, 71 and 72 stand rejected as anticipated by or in the alternative under §103(a) as obvious over Song US 7,087,342.

The present claimed invention uses power generated by the actuator to cause the normally open switch, such as 79 in FIG. 2 to be closed. Paragraphs 40 and 41 of the published application reads as follows:

[0040] In order to provide the failsafe clamping function, circuit 77 should provide power to enable, by closing, the normally-open switch 79. This power can be provided by a storage device such as a battery or a capacitor. However, solutions that utilize a storage device are susceptible to failure if the storage device fails.

[0041] Another manner of providing power to enable the normally-open switch 79 is to use power associated with the back EMF. If the armature 14 is not moving relative to the stator 16, no damping force needs to be provided and the normally-open switch 79 can remain open. However, when the armature 14 begins to move relative to the stator 16, the switch 79 must be closed.

Energy from movement of actuator 12 is then conveyed directly to the switch circuitry, such as failsafe clamping circuit 77, to positively damp the actuator during a failure of the power supply such as electronics 54 that is for providing power to actuator 12.

The title of this application is "FAILSAFE OPERATION OF ACTIVE VEHICLE SUSPENSION."

Thus, claim 1 recites switch circuitry powered by energy, from movement of the actuator, that is directly conveyed to the switch circuitry from electric terminals of the actuator, the switch circuitry to positively damp the actuator during a failure of a power supply for providing power

to the actuator. The same limitation is in independent claim 12 and independent claim 19. Independent claim 26 includes similar language calling for providing power to the actuator, generating a passive damping characteristic of the actuator using switch circuitry powered by energy, from movement of the actuator, that is directly conveyed to the switch circuitry from electric terminals of the actuator during failure of a power supply for providing power to the actuator. Independent claim 63 contains similar language calling for the switch circuitry to respond to a failure of a power supply for providing power to the actuator by performing a switching operating to achieve passive damping of the actuator during the failure, the switch circuitry being powered to perform the switching operation during the failure, directly by movement of the actuator.

The statement in the office action that the reference discloses "actuator 6, 8, 10, 12 comprising switch circuitry 14 powered by energy from movement of the actuator to passively damp the actuator," mischaracterizes what the reference discloses. There is a distinction between power flow controlled by the switch, and power required to actuate the switch. The reference does not disclose using the power flowing through the switch 14 due to actuator motion to enable the switch circuitry.

The reference discloses power generated by movement of the actuator flows from the actuator to switch 14 through control module 4. Control module 4 provides a signal causing switch 14 to change state based on various inputs. The reference does not disclose where the power comes from that powers control module 4 or that actually causes switch 14 to change state. The reference only discloses power generated in the actuator flowing through switch 14 into a resistance or into circuitry to charge a battery. The reference does not disclose the source of power for module 4 or switch 14 or what happens if that power source fails. Accordingly, withdrawal of the rejection of claims 1-3, 5-7, 9, 11-13, 15, 16, 18-22, 24-28, 30-32, 34, 36-41, 59-65, 67-69, 71 and 72 as anticipated by, or in the alternative under §103(a) as obvious over the reference was respectfully requested. If this ground of rejection was repeated, the Examiner was respectfully requested to quote verbatim the language in the reference regarded as corresponding to each limitation in at least each of the independent claims and suggesting modifying what is disclosed in the reference to meet the limitations of these rejected claims. The Examiner did not and cannot comply with this request.

Claims 4, 14, 23, 29 and 66 stand rejected under §103(a) as being unpatentable over Song. This ground of rejection is respectfully traversed. We have shown above that the parents of these claims are neither anticipated by the reference nor are the differences between the reference and the parent claims such that the subject matter as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made. Accordingly, further discussion of this ground of rejection is submitted to be unnecessary. If this ground of rejection was repeated, the Examiner was respectfully requested to quote verbatim language in the reference regarded as suggesting the desirability of modifying what is there disclosed to meet the limitations in these claims. The Examiner did not and cannot comply with this request.

Claims 8, 33 and 70 stand rejected under 35 U.S.C. 103(a) as unpatentable over Song as a primary reference in view of De Puy US 4,314,327 as a secondary reference. This ground of rejection is respectfully traversed. Claims 8, 33 and 70 are dependent upon claims 1, 26 and 63, respectively, and the reasoning set forth above in support of the patentability of the parent claims over the primary reference is submitted to support the patentability of these claims so that further discussion of the secondary reference is unnecessary.

Moreover these claims call for boosting the back EMF by a supplemental circuit that comprises a bipolar Royer oscillator capable of operating at an input voltage approximately 0.5 volt. The Examiner has failed to show any rational explanation of why one skilled in the art would put this combination together to meet the limitations of these claims. What the Examiner is doing is using the claims being rejected as a blueprint or template for attempting to read the claims being rejected upon the references. That approach is not a proper basis for a Section 103 rejection on a combination of references.

Claim 45 stands rejected under §103(a) as unpatentable over Song as a primary reference in view of Miller US 5,296,785 as a secondary reference. Claim 45 is dependent upon and includes all the limitations of claim 26, and the reasoning set forth above in support of the patentability of claim 26 over the primary reference is submitted to support the patentability of claim 45 so that further discussion of the secondary reference is submitted to be unnecessary. However nothing in the secondary reference discloses power electronics powered by a large valued capacitor. Furthermore, since parent claim 26 is not anticipated by the reference as shown above, it is impossible to combine the references to meet the limitations of claim 45.

Applicant : Paul T. Bender  
Serial No. : 10/657,496  
Filed : September 8, 2003  
Page : 4 of 4

Attorney's Docket No.: 02103-0381001 / AABOSS16

Accordingly, withdrawal of the rejection of claim 45 was respectfully requested. If this ground of rejection was repeated, the Examiner was respectfully requested to quote verbatim the language in the references regarded as corresponding to each limitation in claim 45. The Examiner did not and cannot comply with this request.

#### CONCLUSION

In view of the foregoing reasoning and the reasoning and authorities set forth in the response filed 29 April 2009, the decision of the Examiner finally rejecting the claims should be reversed.

Please apply any charges or credits to Deposit Account No. 06-1050, referencing  
Attorney Docket No. 02103-381001 / AABOSS16.

Respectfully submitted,  
FISH & RICHARDSON P.C.

17 July 2009

Date: \_\_\_\_\_

/charles hieken/

---

Charles Hieken  
Reg. No. 18,411  
Attorneys for Application Owner

Fish & Richardson P.C.  
225 Franklin Street  
Boston, MA 02110  
Telephone: (617) 542-5070  
Facsimile: (877) 769-7945